

PATENT

Atty. Dkt. No. ATT/2001-0067

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A radio receiver comprising:
first and second antennas connected to radio frequency (RF) processing circuitry by an RF switch; and
an RF switch control in communication with said RF switch, said RF switch control for switching between said first and second antennas in response to a predefined schedule of a sequence of scheduled packet bursts, wherein said sequence of scheduled packet bursts comprises at least a first signal burst and a second signal burst, wherein the first signal burst and the second signal burst comprise identical packets of a common message.
2. (Previously Presented) The radio receiver of claim 1, wherein:
the RF switch control schedules said sequence of scheduled packet bursts prescribed by a Quality of Service (QoS) defined by a media access control (MAC) protocol.
3. (Previously presented) The radio receiver of claim 2, wherein:
said RF switch control is a MAC processor that is synchronized with transmission of a base station.
4. (Original) The radio receiver of claim 1, wherein:
the antennas are switched so that each antenna receives a related packet burst.
5. (Currently Amended) A method of maintaining a controlled Quality of Service (QoS) in a wireless communication system, comprising steps of:
receiving scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule by wireless transceivers at receiving stations

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having switched protocol diversity reception operational modes, where said scheduled communications being formatted as multiple packet bursts;

enabling a first antenna to receive a first packet burst in accordance with said predefined schedule;

enabling a second antenna to receive a second packet burst in accordance with said predefined schedule, wherein the first packet burst and the second packet burst comprise identical packets of a common message;

recording the received bursts as soft information in a storage medium; and
combining the soft information from the first and second bursts into a single message.

6. (Original) The method of claim 5 wherein:
each packet burst contains a same complete message.
7. (Original) The method of claim 5 wherein:
each packet burst contains a portion of a space-time coded message spread across the first and second packet bursts.
8. (Currently Amended) A method of achieving a Quality of Service (QoS) control in a wireless local area network (LAN) communication system, comprising steps of:
transmitting a message contained within a plurality of packet bursts occurring at spaced time intervals, wherein a first packet burst and a second packet burst of said plurality of packet bursts comprise identical packets of a common message; and
receiving each of the packet bursts individually at one of a plurality of antennas in accordance with a predefined schedule, where said predefined schedule is used to select one of said plurality of antennas for receiving each of said packet bursts.
9. (Previously presented) The method of claim 8 wherein;
each of the plurality of the antennas is connected to a radio receiver at separate times relative to other antennas.

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10. (Original) The method of claim 8, wherein:
including a complete message within each packet burst.
11. (Original) The method of claim 8 wherein:
a message is spread across the plurality of packet bursts by space-time coding.
12. (Previously presented) The method of claim 8 wherein:
the transmitting combines a protocol with signal processing.
13. (Currently Amended) A communication system for coupling a transmitter and a receiver adapted for receiving at least first and second signal bursts by first and second antennas respectively, and responding to the two signal bursts to communicate a single unified message at the receiver; whereby:
the first and second signal bursts are sequentially separated in time in accordance with a predefined schedule, wherein the first signal burst and the second signal burst comprise identical packets of a common message;
the first and second antennas are sequentially enabled in accordance with said predefined schedule to communicate with at least one storage medium at the receiver;
and
enabling a representation of the unified message by responding to the first and second signal bursts.
14. (Canceled)
15. (Original) The communication system of claim 13, wherein:
the first and second signal bursts are each part of a space-time coded message spread across two bursts; and
a common message is derived from the sequential signal bursts received by the first and second antennas.
16. (Previously presented) The communication system of claim 13, wherein:

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said enabling includes retaining the first and second signal bursts in said at least one storage medium and processing to deliver the single unified message.

17. (Previously presented) The communication system of claim 15, wherein:
said deriving the common message includes selecting a message from one of the antennas.

18. (Previously presented) The communication system of claim 15, wherein:
said deriving the common message includes decoding a space-time coded signal spread across and received by both the first and second antennas.

19. (Previously presented) The method of claim 8, including a further step of:
notifying a transmitter at a transmitting end by a receiving end of a number of antennas and radio receivers at the receiving end.

20. (Previously presented) The method of claim 8, including a further step of:
a receiver notifying a transmitter that said receiver accepts and responds to protocol-assisted diversity operations.

21. (Previously presented) The method of claim 8, including a further step of:
upon reconstruction of a received message sending a message to a transmitting end to cease further message bursts.